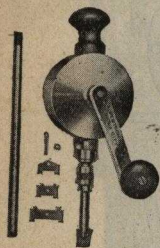


Sioux Valve Grinders

Designed to meet the demand for a simple, inexpensive tool that will do good work. Constructed of best materials and ball-bearing.

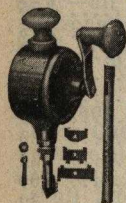
By turning handle continuously in the same direction, the valve rotates back and forth on its seat, a little farther in one direction than the opposite. This produces a reciprocating motion which is absolutely necessary for perfectly ground valves. Furnished with five interchangeable driving points. Packed 1 in a box.



No. 400.....Each, 7.00

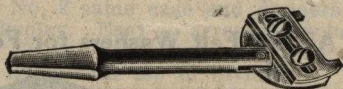
"Little Sioux" Valve Grinders

Similar in construction to Sioux Valve Grinder, but designed for the car-owner who desires to grind his own valves. Furnished with 5 interchangeable driving points. Packed 1 in a box.



No. 401.....Each, 3.50

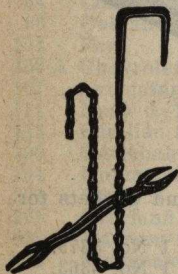
Perfect Valve Grinders



Adjustable to fit any valve. Used with a regular bit brace. Head will swivel to permit grinding valves from any angle.

No. 7026.....Per doz., \$4.80

Chain Valve Spring Release

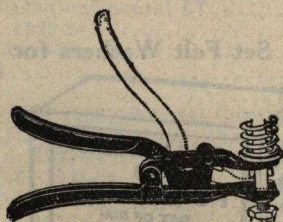


Will fit any motor. The lever has a narrow fork at one end and a wide one at the other to accommodate valves having split washers or pins to hold the spring on the stem. Finish, black japan.

Packed 1 in a box.

No. 3.....Each, \$0.90

T & L Valve Lifters

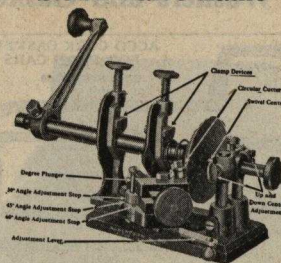


The T & L Valve Lifter is made of pressed steel, and operates as easily as a pair of pliers. It automatically locks itself when applied to the spring, allowing the free use of both hands to remove the pin and take out the valves. No hooks, chains, or springs to get out of order. This is the most practical and simple tool on the market. Especially adapted to Ford motors, but adjustable to other motors as well. Packed 1 in a box.

No. 28934—Small size for Ford and Small Cars. Each, \$1.10
No. 28935—Large size for Large Cars and

Tractors.....Each, \$4.00

Sioux Valve Lathe



Refaces Valves of Either 30, 45 or 60 Degree Angles.

The Sioux Valve Lathe is more accurate than any machine lathe. It involves no guess-work; any novice can operate it. There are three adjustment stops for refacing valves of either 30, 45 or 60 degree angles. These three angle adjustments are accurately and permanently built into the tool. A change from one to the other is merely a matter of moving the degree plunger.

Any valve from 1 3/8 to 4 1/2 inches in diameter centers itself in the Sioux Valve Lathe. The tool is equipped with a swivel center device that brings the center adjustment automatically into perfect alignment on the valve. The two clamp devices take any size valve stem, and hold the valve firmly and steadily against the cutter, while the crank turns out the job.

The round cutter on the Sioux Valve Lathe sets up a new principle of cutting steel and cast iron valves. It leaves no ridges or uneven surfaces on the valve-face; it cuts an absolutely smooth surface without chattering. Furthermore, the circular shape of this cutter supplies unlimited cutting edge. This cutter has the life of at least ten ordinary cutters before it needs to be resharpened.

The Sioux Valve Lathe comes supplied with a small crank for small valves, and a larger size crank for large valves. It is also supplied with the necessary springs for all sizes of valves. The tool can be permanently fixed to a bench, or held in a vise while it works. Packed 1 in a box.

No. 600—Sioux Valve Lathe.....Each, 25.00

No. 601—Extra Cutters for above.....Each, 1.50

Little Sioux Valve Lathe

This is built on the same principle as the No. 600 except that it will only handle valves up to 2 1/2 inches diameter. There are three adjustments plainly marked for refacing 30, 45 and 60 degree valves. Easy to adjust and after adjustment is made it cannot slip.

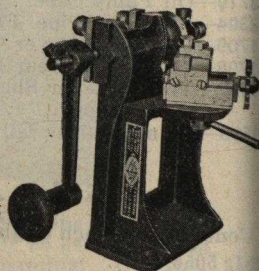
The tool holder is adjustable in or out and the cutter cannot get out of line with the valves.

The cutter is circular shape, providing unlimited cutting edges and made of a special composition metal particularly adapted for cutting hard tungsten steel valves.

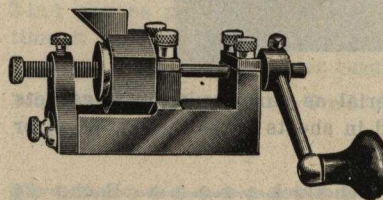
The frame is made to accommodate any size of valve stem. When the cutter is set for a certain size valve, it will always be perfectly centered for the same size valve. Packed 1 in a box.

No. 700.....Each, 12.50

No. 701—Extra Cutters for above.....Each, 1.50



Sioux Valve Refacing Tool



The construction and operation of this device is very simple. The cutter is made of the best kind of Tungsten Steel, hardened and tempered to stand hard service. It

locks into a vise and is ready for use in an instant. Will reface any cast iron-valve from 1 to 2 1/2 inches. One 45 degree cutter only is furnished as regular equipment. Packed 1 in a box.

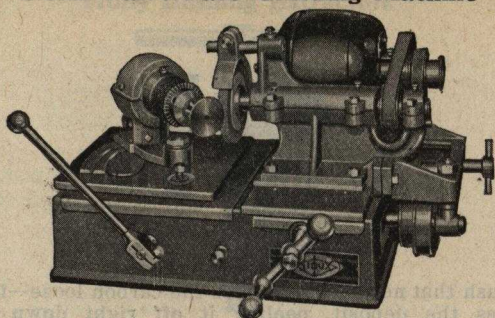
No. 304—With 45 degree cutter.....Each, 7.25

No. 301—30 degree cutter only for above.....Each, 1.25

No. 302—45 degree cutter only for above.....Each, 1.25

No. 303—60 degree cutter only for above.....Each, 1.25

Sioux Valve Face Grinding Machine

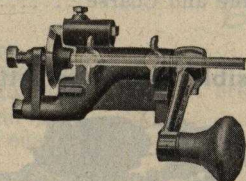


Will sharpen any "Sioux" Valve Seat Reamer. Will grind tappet ends, and reseat any removable valve cages.

The Sioux Valve Face Grinding Machine is a motor-driven machine that will give superior service on a wide range of work. It is absolutely accurate on any class of work, and will prove itself a labor saver in any shop. It grinds and refaces any valves up to $4\frac{1}{2}$ inches in diameter, and accommodates valve stems of $\frac{5}{8}$ -inch and under. It has marked adjustment stops for valve angles of 30, 45 and 60 degrees, but will work on any other angle desired. It is equipped with a Jacobs chuck, and is driven by a $\frac{1}{4}$ -h. p. A. C. electric motor. If D. C. Motor is desired, add 6.00 to price. A. C. Motor shipped unless otherwise specified. Packed 1 in a box.

No. 650—With A. C. Motor.....Each, 210.00

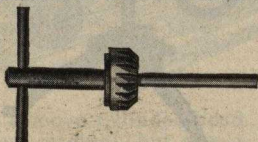
Sioux Ford and Fordson Valve Refacing Tool



The Sioux Ford and Fordson Valve Refacing Tools, although low in price, are high grade tools accurately made. They will reface Ford and Fordson valves accurately and smoothly. The cutters are made of high Tungsten steel, the same as used for lathe tools. Packed 1 in a box.

No. 202—Ford.....Each, 1.75
No. 204—Fordson.....Each, 2.00

Sioux Ford and Fordson Valve Seat Reamers



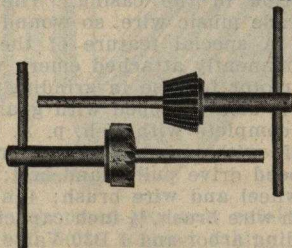
Cut shows "T" Handle Type.

The Ford and Fordson Valve Seat Reamers are tools of the same grade, material and workmanship as our standard line of reamers. They reface valve seats with the same accuracy and perfection.

Nos. 200 and 203 have a "T" handle, and No. 201 is furnished with square shank of the Hand Reamer type. Packed 1 in a box.

No. 200—Ford.....1.75
No. 203—Fordson.....2.00
No. 201—Ford.....1.75

Sioux Ford and Fordson Valve Seat Reamer Set



For narrowing valve seats on Ford and Fordson motors. In ordering, please specify degree wanted. Packed 1 in a box.

No. 206A—15°, for Ford.....Each, 5.00
No. 206B—75°, for Ford.....Each, 5.00
No. 207A—15°, for Fordson.....Each, 6.00
No. 207B—75°, for Fordson.....Each, 6.00

Sioux Valve Seat Reamers



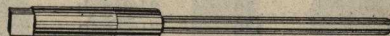
This tool makes a quick, easy job of removing all carbon pits and irregularities. It faces the seat perfectly at the proper angle. The reamers are made of the best tool steel, treated to stand up on valve seat reaming. Ground with proper clearance on the cutting points.

All Sioux Valve Seat Reamers can be had in any degree, 15, 30, 45, 60 or 75. Unless specified, all Reamers will be 45 degrees.

Sizes $1\frac{1}{4}$ to $2\frac{1}{2}$ have $\frac{11}{16}$ -inch Pilot Stem Hole and use Pilot Stems Nos. 120 to 125. Sizes $2\frac{3}{8}$ to 4-inch have $\frac{1}{2}$ -inch Pilot Stem Hole and use Pilot Stems Nos. 126 to 129.

Size	Each	Size	Each
$1\frac{1}{4}$	3.50	$2\frac{1}{2}$	3.75
$1\frac{3}{8}$	3.50	$2\frac{7}{8}$	3.75
$1\frac{7}{8}$	3.50	$2\frac{1}{8}$	3.75
$1\frac{1}{2}$	3.50	$2\frac{3}{4}$	3.75
$1\frac{3}{4}$	3.50	$2\frac{5}{8}$	3.85
$1\frac{1}{8}$	3.50	$2\frac{3}{8}$	3.85
$1\frac{1}{4}$	3.50	$2\frac{7}{8}$	3.85
$1\frac{1}{2}$	3.50	$2\frac{1}{2}$	3.85
$1\frac{3}{8}$	3.50	$2\frac{1}{4}$	3.85
$1\frac{7}{8}$	3.50	$2\frac{3}{4}$	4.25
$1\frac{1}{2}$	3.50	$2\frac{5}{8}$	4.25
$1\frac{3}{4}$	3.50	$2\frac{1}{8}$	4.50
$1\frac{1}{8}$	3.50	$2\frac{3}{8}$	4.50
$1\frac{1}{4}$	3.50	$2\frac{7}{8}$	4.50
$1\frac{1}{2}$	3.50	$2\frac{1}{4}$	5.00
$1\frac{3}{8}$	3.50	$2\frac{5}{8}$	5.25
$1\frac{7}{8}$	3.50	3.....	5.75
$1\frac{1}{2}$	3.50	$3\frac{1}{8}$	6.00
$1\frac{3}{4}$	3.50	$3\frac{1}{4}$	6.25
$1\frac{1}{8}$	3.50	$3\frac{3}{8}$	6.75
$1\frac{1}{4}$	3.50	$3\frac{1}{2}$	7.00
$1\frac{1}{2}$	3.50	$3\frac{5}{8}$	7.50
$1\frac{3}{8}$	3.50	$3\frac{3}{4}$	7.75
2.....	3.50	$3\frac{7}{8}$	8.10
		4.....	8.50

Sioux Reamer Pilot Stems



Accurately machined to fit perfectly. On special orders can furnish any size Pilot Stem to fit any size Valve Seat Reamers. Nos. 120 to 125 fit all Reamers $2\frac{1}{2}$ -inch and smaller. Nos. 126 to 129 fit all Reamers over $2\frac{1}{2}$ -inch. We can also furnish in $\frac{1}{4}$ -inch oversize from factory. Packed 1 in a box.

No. 120— $\frac{1}{8}$ inch.....	Each, 1.25
No. 121— $\frac{3}{16}$ inch.....	Each, 1.25
No. 122— $\frac{1}{4}$ inch.....	Each, 1.25
No. 123— $\frac{5}{16}$ inch.....	Each, 1.25
No. 124— $\frac{3}{8}$ inch.....	Each, 1.25
No. 125— $\frac{1}{2}$ inch.....	Each, 1.25
No. 126— $\frac{5}{8}$ inch.....	Each, 2.00
No. 127— $\frac{3}{4}$ inch.....	Each, 2.00
No. 128— $\frac{7}{8}$ inch.....	Each, 2.00
No. 129—1 inch.....	Each, 2.00

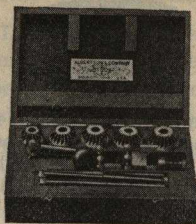
Sioux Standard Valve Seat Reamers



Designed to reseat valve seats of detachable head motors from $1\frac{1}{8}$ to $2\frac{1}{2}$ inches. Its wide variation has made it exceptionally popular with garages everywhere. Can be used with all regular Sioux Pilot Stems up to and including the $\frac{1}{2}$ -inch. Made in 45 degree angle only. Packed 1 in a box.

No. 175.....Each, 5.00

Sioux Valve Tool Set



This set is complete enough to take care of practically all the jobs that an average garage or auto repair shop is likely to get. Sioux Valve Seat Reamers reface valve seats with the same dispatch, accuracy, smoothness and general satisfaction that the Sioux Valve Refacing tool refaces the valves. The standard set is made in 45 degrees angle only and consists of 1 No. 304 Valve Refacing Tool, 5 Valve Seat Reamers and 3 Pilot Stems.

Reamers.			
1½-inch.....	45°	2 -inch.....	45°
1⅝-inch.....	45°	2⅝-inch.....	45°
	2¼-inch.....		45°
Pilot Stems ⅝-inch, ¾-inch and ⅞-inch.			
No. 300.....Per set, 28.50			

Sioux Valve Tool Set



A complete set for practically all reseating jobs. It includes 10 Sioux Valve Seat Reamers and 4 Pilot Stems.

Reamers.		Reamers.	
1½-inch.....	45°	1⅞-inch.....	45°
1⅝-inch.....	45°	2 -inch.....	45°
1⅞-inch.....	30°	2⅝-inch.....	45°
1¾-inch.....	30°	2¼-inch.....	45°
1¾-inch.....	45°	2½-inch.....	45°

Pilot stems ⅝-inch, ¾-inch, ⅞-inch, ½-inch.
Comes complete in box with each stem place and each reamer post marked for each size.
No. 325.....Per set, 40.00

Sioux Valve Stem Guide Reamer



This type of Reamer is the most successful for reaming worn valve guide holes. The pilot end of the Reamer is to guide and prevent the Reamer from following the worn part of the hole.

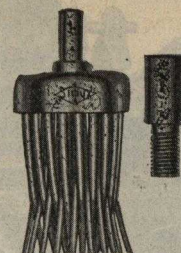
Sioux Quality—the highest grade tool, set, heat treated and machined with absolute accuracy. Insures a quick, sharp, smooth cut, and will keep its fine edges almost permanently.

For reaming ⅛-inch oversize on all sizes of Valve Stem Guides.

Made in the four sizes, each size plainly marked for convenient use.

Reamer Size	Each
⅜—For reaming ⅛ over ⅝-inch.....	2.50
⅝—For reaming ⅛ over ¾-inch.....	2.70
¾—For reaming ⅛ over ⅞-inch.....	2.90
⅞—For reaming ⅛ over 1½-inch.....	3.10
Special or larger sizes made to order. Price upon request.	

Sioux Carbon Removing Brush

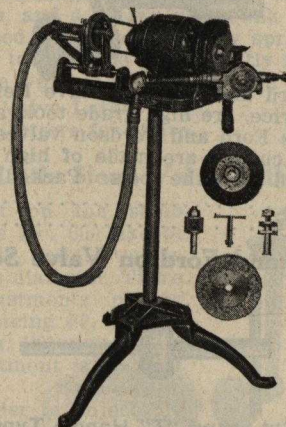


A brush that not only scratches the carbon loose—it really removes the deposit, peeling it off right down to the metal, restoring the metal's bright polish and finish. Since the first automobile mechanic attempted to remove carbon from cylinder heads and blocks, numerous scratchers and scrapers have been put upon the market, but without exception they have been only partially successful. This Sioux Carbon Removing Brush is the outgrowth of a long-felt need—it possesses the two main requirements—efficiency and speed. The secret of the efficiency of the Sioux Brush lies in the strength and stiffness of the wires and their arrangement. Their unbending stiffness insures a firm contact against the carbon, and the brush is extremely durable and strong.

For use with small electric drills and Sioux Flexible Shaft, fitted with both ¼-inch and ⅞-inch arbors.

No. B66—Coarse.....	Each, 2.50
No. B67—Fine.....	Each, 2.50
No. B68—Set of Fine and Coarse.....	Each, 5.00

Sioux Flexible Shaft and Attachments



Transmits power exactly where you want it. Especially adapted for Valve Grinding. The 3-speed pulley provides the correct speed, low for large valves, higher for smaller valves. A control enables you to stop and start at will. Can take emery wheel to the work and get into inaccessible places. Especially handy in welding work for smoothing out the weld. Other jobs for which the Sioux Flexible Shaft and Attachments are quick and handy are Drilling, Reaming and Polishing and Cleaning Carbon.

The roller bearing features, an exclusive Sioux feature on the Flexible Shaft, adds life and gives more power by eliminating friction in the casing. The shaft itself is made of high grade music wire, so wound as to make the shaft compact. A special feature of the Sioux Flexible Shaft is the permanently attached emery wheel (6-inch by ½-inch) to the motor for use in grinding tools and other small parts. It is also equipped with guard and tool rest.

No. 802—Stand complete with ½-h. p. A. C. motor, flexible shaft with universal joint and spindle control, 3-speed drive pulley and belt; 2 arbors for emery wheel and wire brush; 4-inch emery wheel; 4-inch wire brush, ¼-inch capacity Jacobs chuck including arbor and 1 B30 Valve Grinding Attachment.....	Each, 165.00
No. 804—Stand complete, 6-inch wire brush permanently attached on motor, one 4-inch emery wheel and arbor, ¼-h. p. A. C. motor.....	Each, 130.00
No. 825—Comes complete as No. 802, except valve grinding attachment and universal joint.....	Each, 135.00
If D. C. motor is desired, add 6.00 to above prices.	